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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,504	10/29/2003	Tetsuya Kobayashi	1324.68599	5768

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EXAMINER	
MOON, SEOKYUN	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,504	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Seokyun Moon	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-55* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. **Claims 1-17** and **22-28**, drawn to an active matrix type liquid crystal display device including an illumination device comprising at least one light source, one light-emitting area, and a light source power supply circuit, classified in class 345, subclass 102.

   II. **Claims 18-21 and 42**, drawn to a liquid crystal display device comprising an illumination device and a display data conversion part, classified in class 345, subclass 211.

   III. **Claims 29-41**, drawn to an illumination device comprising a first and a second linear light source, a light source driving circuit, and a light guide plate, classified in class 349, subclass 62.

   IV. **Claims 43-50**, drawn to a polarizing plate previously heat shrunk before being bonded to a surface of a light guide plate of an illumination device, classified in class 445, subclass 24.

   V. **Claims 51-55**, drawn to a liquid crystal display device comprising a vertical aligned liquid crystal display area and a black display control part, classified in class 345, subclass 99.

2. The inventions are distinct, each from the other because of the following reasons:

3. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as a light source power supply circuit for switching between a maximum lighting state and an intermediate lighting state while subcombination II has separate utility such as a display data conversion part for calculating respective lightness and a lightness histogram from the respective gradation data, determining a threshold lightness from the lightness histogram on the basis of a previously determined ratio of pixels to be saturated in brightness. See MPEP § 806.05(d).

4. Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as a light source power supply circuit for switching between a maximum lighting state and an intermediate lighting state while subcombination III has separate utility such as a light source driving circuit for turning on light sources at a specified blinking frequency. See MPEP § 806.05(d).

5. Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as

a light source power supply circuit for switching between a maximum lighting state and an intermediate lighting state while subcombination IV has separate utility such as a polarizing plate previously heat shrunk before being bonded to a surface of a light guide plate or a surface of a liquid crystal panel. See MPEP § 806.05(d).

6. Inventions I and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as a light source power supply circuit for switching between a maximum lighting state and an intermediate lighting state while subcombination V has separate utility such as a black display control part causing a specified area of a screen to produce a black display at a timing of driving of the liquid crystal display area. See MPEP § 806.05(d).

7. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as a display data conversion part for calculating respective lightness and a lightness histogram from the respective gradation data, determining a threshold lightness from the lightness histogram on the basis of a previously determined ratio of pixels to be saturated in brightness while subcombination III has separate utility such as a light source driving circuit for turning on light sources at a specified blinking frequency. See MPEP § 806.05(d).

8. Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as a display data conversion part for calculating respective lightness and a lightness histogram from the respective gradation data, determining a threshold lightness from the lightness histogram on the basis of a previously determined ratio of pixels to be saturated in brightness while subcombination IV has separate utility such as a polarizing plate previously heat shrunk before being bonded to a surface of a light guide plate or a surface of a liquid crystal panel. See MPEP § 806.05(d).

9. Inventions II and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as a display data conversion part for calculating respective lightness and a lightness histogram from the respective gradation data, determining a threshold lightness from the lightness histogram on the basis of a previously determined ratio of pixels to be saturated in brightness while subcombination V has separate utility such as a black display control part causing a specified area of a screen to produce a black display at a timing of driving of the liquid crystal display area. See MPEP § 806.05(d).

10. Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in

scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination III has separate utility such as a light source driving circuit for turning on light sources at a specified blinking frequency while subcombination IV has separate utility such as a polarizing plate previously heat shrunk before being bonded to a surface of a light guide plate or a surface of a liquid crystal panel. See MPEP § 806.05(d).

11. Inventions III and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination III has separate utility such as a light source driving circuit for turning on light sources at a specified blinking frequency while subcombination V has separate utility such as a black display control part causing a specified area of a screen to produce a black display at a timing of driving of the liquid crystal display area. See MPEP § 806.05(d).

12. Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination IV has separate utility such as a polarizing plate previously heat shrunk before being bonded to a surface of a light guide plate or a surface of a liquid crystal panel while subcombination V has separate utility such as a black display control part causing a

specified area of a screen to produce a black display at a timing of driving of the liquid crystal display area. See MPEP § 806.05(d).

13. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000. June 26, 06 S.M.

Kent Chang

KENT CHANG
PRIMARY EXAMINER